

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A manufacturing method of a semiconductor device, comprising the steps of:

selectively injecting impurities into a semiconductor substrate to form an impurity region;

processing a laser beam having a fundamental wave into a long beam on a surface of the impurity region; and

moving the surface of the impurity region relatively to the long beam to scan the laser beam to activate the impurity region,

wherein the laser beam having a fundamental wave is oscillated with a pulse width of 1 femtosecond or more and 10 picoseconds or less.

2. (Currently Amended) A manufacturing method of a semiconductor device, comprising the steps of:

forming a gate insulating film over a semiconductor layer of an SOI substrate;

forming a gate electrode over the gate insulating film;

selectively injecting impurities into the semiconductor layer of the SOI substrate to form an impurity region;

processing a laser beam having a fundamental wave into a long beam on a surface of the impurity region; and

moving the surface of the impurity region relatively to the long beam to scan the laser beam to activate the impurity region,

wherein the laser beam having a fundamental wave is oscillated with a pulse width of 1 femtosecond or more and 10 picoseconds or less.

3. (Original) The manufacturing method of a semiconductor device according to claim 1 or 2, wherein the impurity region is source and drain regions of a field effect transistor.

4. (Original) The manufacturing method of a semiconductor device according to claim 1 or 2, wherein the impurity region is an extension region of a field effect transistor.

5. (Canceled)

6. (Previously Presented) The manufacturing method of a semiconductor device according to claim 1 or 2, wherein the laser beam having a fundamental wave is emitted from one kind of lasers in which one or more of Nd, Yb, Cr, Ti, Ho and Er, is/are added as a dopant into a crystal of Sapphire, YAG, ceramics YAG, ceramics Y_2O_3 , KGW, KYW, Mg_2SiO_4 , YLF, YVO_4 , or $GdVO_4$.

7. (Previously Presented) The manufacturing method of a semiconductor device according to claim 1 or 2, wherein the laser beam is pulsed laser light with a repetition rate of 10MHz or more.

8.-10. (Canceled)

11. (New) The manufacturing method of a semiconductor device according to claim 1, wherein a peak output power of the laser beam is $1GW/cm^2$ to $1TW/cm^2$.

12. (New) The manufacturing method of a semiconductor device according to claim 2, wherein a peak output power of the laser beam is $1GW/cm^2$ to $1TW/cm^2$.

13. (New) The manufacturing method of a semiconductor device according to claim 1, wherein a wavelength band of the fundamental wave is from red ray to near-infrared ray.

14. (New) The manufacturing method of a semiconductor device according to claim 2, wherein a wavelength band of the fundamental wave is from red ray to near-infrared ray.